

Date: Tue, 8 Mar 94 04:30:29 PST
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: Bulk
Subject: Ham-Equip Digest V94 #56
To: Ham-Equip

Ham-Equip Digest Tue, 8 Mar 94 Volume 94 : Issue 56

Today's Topics:

Battery Packs
Does anyone make a better AM filter for the TS-50?
ICOM 2SRA antenna adapter
Icom IC22A Crystals?
MFJ SWR Analyzers
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Opinions on IC-2SRA?
Reviving Old Equipment
Sidebands
TM732A owners tip of the month
WANTED: Test Equipment

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 7 Mar 94 20:55:46 -0500
From: ihnp4.ucsd.edu!swrinde!gatech!howland.reston.ans.net!noc.near.net!
news.delphi.com!usenet@network.ucsd.edu
Subject: Battery Packs
To: ham-equip@ucsd.edu

I have a friend who has a Kenwood TR2500HT with a BP25 Battery Pack.
He has found a source of replacement ni cad batteries for the battery
pack, but he is a little hesitant about opening up the pack. It
does not look like it was designed to be taken apart on a whim.
The place he bought the replacement batteries was no help on this.
Does anyone have any experience with this? Should he just unscrew

everything that looks like it unscrews and pry the unit open,
or is their a secret password (other than Anglo Saxon)?
Gordon

Date: 8 Mar 1994 01:24:47 GMT
From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!usc!yeshua.marcam.com!channel!
olivea!inews.intel.com!scdt!dbraun@network.ucsd.edu
Subject: Does anyone make a better AM filter for the TS-50?
To: ham-equip@ucsd.edu

I like my TS-50, but the cheap 2-pole stock AM filter is not that great for listening to SW broadcasts. Does anyone know if it's possible to get an aftermarket AM filter for the TS-50? Unfortunately, this radio uses a non-standard (for AM/SSB, at least) IF of 10.7 MHz.

— —

Doug Braun Intel Design Technology
408 765-4279

dbraun@scdt.intel.com

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      / decwrl \
      | hplabs |
or maybe: -| oliveb | - !intelca!mipos3!cadev6!dbraun
      | amd |
      \ gantel /

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"There is no human problem which could not be solved if people would simply do as I advise." -- Gore Vidal

Date: Mon, 7 Mar 1994 21:27:39 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!
howland.reston.ans.net!wupost!ukma!rsg1.er.usgs.gov!dgg.cr.usgs.gov!
bodoh@network.ucsd.edu
Subject: ICOM 2SRA antenna adapter
To: ham-equip@ucsd.edu

I have found a source for the female BNC to 1/8" male phone adapter needed to connect a BNC antenna to the scanner side of the ICOM 2SRA (or 4SRA). In order to defray the relatively high shipping costs, I ordered 15 of them. I have resold 8 of them, so 7 are still available. I haven't weighed one yet but

I am figuring that I'll be able to cover my cost, plus shipping for \$3 - so if you are interested, please email me. Bye...

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+++++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT      +
+ USGS/EROS Data Center, Sioux Falls, SD, USA  57198      (605) 594-6830  +
+ Internet; bodoh@dggs.cr.usgs.gov (152.61.192.66)
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      +
+   "Welcome back my friends to the show that never ends!" EL&P
      +
+++++
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Date: Mon, 7 Mar 1994 18:08:27 GMT
From: ihnp4.ucsd.edu!usc!yeshua.marcam.com!news.kei.com!news.byu.edu!
news.mtholyoke.edu!news.unomaha.edu!news.nevada.edu!jimi!envoy!
jim@network.ucsd.edu
Subject: Icom IC22A Crystals?
To: ham-equip@ucsd.edu

I recently ordered 2 pairs of crystals to put my Icom IC22A on 2 local packet frequencies: 144.95 & 144.97. When the crystals arrived and were installed, they gave operating frequencies of 144.93 & 144.95 respectively, 20 kHz below the desired frequencies. I called Icom and verified that the formulas & crystal specifications used by the crystal manufacturer were correct. The crystal frequency formulas are:

$$(1) \quad T = F_{tx} / 8$$

$$(2) \quad R = (F_{rx} - 10.7) / 9$$

where: T = transmit crystal frequency in MHz
R = receive crystal frequency in MHz
F_{tx} = transmitter operating frequency in MHz
F_{rx} = receiver operating frequency in MHz

The crystal capacitance is specified as 20 pf for both R and T.

I even sent 2 pairs of original crystals (146.94 simplex and 146.88/146.28) back to the crystal manufacturer for testing to make sure that these crystal matched the original specifications, which they did.

The only thing I can think of is that the crystal frequency formula (or the radio!) is not linear down in the lower part of the band. To test this

idea I should have sent back for testing a 145.01 crystal pair that is marked correctly and works just fine.

Can anyone offer any ideas regarding this problem? I considered just keeping the 144.97 pair and using it on 144.95, and then ordering a 144.99 pair for use on 144.97, but I would like them to be marked accurately, and in any case I would like to understand why the problem exists in the first place. Thanks.

--

Jim Mueller		Work : (702) 689-3111		net: jim@unssun.scs.unr.edu
11865 Deodar Way		Home : (702) 677-2775		WB7AUE
Reno, NV 89506				

Date: 4 Mar 94 06:26:11 GMT
From: agate!howland.reston.ans.net!torn!nott!uotcsi2!hassan@ucbvax.berkeley.edu
Subject: MFJ SWR Analyzers
To: ham-equip@ucsd.edu

Henry B. Smith (henrys@netcom.com) wrote:
: Is anybody familiar with either the MFJ-249 or MFJ-259 SWR analyzers?
: Can the MFJ-259 really measure feed-point resistance when it is
: inserted at the equipment end of the coax?

: A general question: Can you dependably determine the resonance of an
: antenna by looking for the lowest SWR?

I'm familiar to neither but I can tell you that you can't determine the feed point resistance using SWR information only. With SWR you can only determine the magnitude of the reflection coefficient. If you wish to determine the feed-point resistance, you also need to have the phase of the reflection coefficient at the feed point. One of the ways of knowing the phase is through determining the position of the first voltage minimum. I don't know if the above analyzers can provide that. If they do, you can always find the relationship between the position of the first voltage minimum with the reflection coefficient phase from many antenna books.

As to your second question, the answer is generally Yes! But be careful, the resonance is also dependent on the reactance (in fact capacitance) resulting from the junction between the antenna and the coax. With different junctions you have different capacitances and hence the

resonance shifts even if the antenna is the same. Examples of what makes different junctions is different coaxial lines, different coax connectors etc

Hassan <<hassan@aix1.uottawa.ca>>

Date: 7 Mar 1994 16:55:11 GMT
From: ihnp4.ucsd.edu!agate!etch-eshop.Berkeley.EDU!ron@network.ucsd.edu
Subject: Need documentation for Kenwood TR2500 HT
To: ham-equip@ucsd.edu

Hello,

I need to get the manuals and sckematics for a Kenwood TR2500 HT. Does anyone have these ? I'd be more than willing to pay for copying etc.

Maybe someone could e-mail me the address and phone # of Kenwood so I could purchase them directly.

73's

Ron Viegelahn

ron@etcheshop.Berkeley.EDU

Date: Mon, 7 Mar 1994 18:06:08 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!newshub.nosc.mil!news!
Roger.Keating@network.ucsd.edu
Subject: Opinions on IC-2SRA?
To: ham-equip@ucsd.edu

Dave, I own a 2SRA. If you have specific questions please email me. There are several good and bad things in general about this radio.

Good: Icom quality 2m radio, full features standard just as W2A has, etc. Scanner has WFM mode. Radio has good audio, provided good speaker and mic are used.

Bad: Scanner antenna is poor, and the connector is poorer. Print wears off the rubber buttons. Power is controled by a soft-switch rather than a hardware switch. Mic attachment is non-standard and so is external audio.

Battery attachment is not rugged enough to suit me.

Other comments certainly apply.

I have had mine for two years; no service and it works fine. I have no intention of selling it, so I guess that tells you what I think of mine.

Roger Keating - KD6EFQ
keating@nosc.mil

Date: 4 Mar 94 02:56:29 GMT
From: sdd.hp.com!col.hp.com!srngenprp!alanb@hplabs.hp.com
Subject: Reviving Old Equipment
To: ham-equip@ucsd.edu

frsni00!taleona@frsni08 (frsni00!taleona@frsni08) wrote:

: In article <2knvpb\$5jg@tymix.Tymnet.COM>, <flanagan@niagara.Tymnet.COM> writes:
: > Back in 1972 I decided to indulge myself and bought a Drake Line: ...
: >
: > After more than twenty-one years, those boxes are still unopened.
: >
: > Questions for the net:
: >
: > 1. How should I re-introduce this equipment to power after all these
: > years? Visions of leaking capacitors, cracking resistors and
: > flaking insulation fill my head. . . .
: >
: I have used for many years an AC variable transformer and
: start at 10vac and bring up th volatage by 10vac about
: every 15 min. ...

There are several possible problems. One is the electrolytic capacitors gradually lose their voltage rating when not used. Applying voltage allows the insulation between the internal plates to "form" again, but if you apply it too suddenly, the leakage current will be high enough to blow the caps. So bringing up the voltage slowly with a Variac is a very good idea.

Another possible problem is moisture within the power transformer windings. Again, if you bring up the line voltage very slowly WITH THE TUBES PLUGGED IN so the filaments provide a load, the transformer will have a chance to warm up and drive off the moisture before the voltage gets high enough to arc the damp windings. When I say "very slowly", I mean over a many-hour period.

: The r4 and t4 where good rigs in there day but as
: you say do not have the bands of today or the selectivaty
: of todays rigs

The selectivity of the R4 filters was pretty good. For one thing, it came standard with a good selection of different bandwidths, which are extra-cost options on most modern transceivers. For another, the R4 has much better front-end selectivity than the broadband-tuned designs in use today, and the local oscillator has less phase noise, for better rejection of out-of-passband interference.

It's true the R4 does not have 0-30 MHz receive capability, but you can buy crystals to add the bands you are interested in.

AL N1AL

Date: Mon, 7 Mar 1994 15:14:53 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!howland.reston.ans.net!torn!
watserv2.uwaterloo.ca!barnbore.watstar.uwaterloo.ca!CROUNG@network.ucsd.edu
Subject: Sidebands
To: ham-equip@ucsd.edu

Can anyone out there tell me what the upper and lower sideband means. For example what is the difference between the upper sideband of 3.860 MHz and the lower sideband of 3.860 MHz.

Chris

Date: 7 Mar 1994 18:37:43 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!dfk@network.ucsd.edu
Subject: TM732A owners tip of the month
To: ham-equip@ucsd.edu

Brett Miller - Support Engineer (bmiller@landesk.intel.com) wrote:
: I just thought I would pass this along to save others some grief.

: I usually hop in my car, start the engine, push the power button on my
: 732A, and then hold down the memory button to start scanning the memories.

: TOTAL RADIO RESET!!!!

I've had my 732 since August, and I've done this twice now. I think Kenwood

made a big mistake in allowing a total wipeout of all memory by just pushing one button, and that button is commonly used!

S00000000, has anyone figured out to backup the radio using the clone mode? I was hoping that one could save all the data through the mic cable if it comes out in an RS-232 fashion by saving it in a PC or laptop. Then the next time I reset the 732, I could just download the data instead of punching 64 memory channels back in and trying to remember how to set back all the different modes I had.

Dave N0UVR
dfk@col.hp.com

Date: 8 Mar 94 01:14:42 GMT
From: nprdc!ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.utdallas.edu!feenix.metronet.com!serafin@network.ucsd.edu
Subject: WANTED: Test Equipment
To: ham-equip@ucsd.edu

I am looking for the following test equipment:

HP141T Display Mainframe
HP8552B Spectrum Analyzer IF Plug-In

Tek 7B53A Dual Time Base Plug-In

I'd also be interested in other 7000 series plug-ins that you might want to part with.

E-mail or post

Mike Serafin
serafin@metronet.com or
serafin@spdc.ti.com

End of Ham-Equip Digest V94 #56
